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DOGM
MINERALS PROGRAM
FILE COPY

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August 21, 1990

TO: Wayne Hedberg, Permit Supervisor

FROM: Holland Shepherd, Reclamation Soils Specialist *HHS*

RE: Review of Large Mine Operation Revision, Iron Mountain Mine, Geneva Steel Company, M/021/008-90(1), Iron County, Utah

The following comments address my review of Geneva Steel Company's February 1990 submittal.

The operator submitted a Large Mining Notice of Intent form, along with a form MR-REV. Form MR-REV covers only the Chesapeake/Excelsior projects. I assume the submittal is intended to cover all changes to the Iron Mountain mine.

R613-004-105 - Maps and Drawings

The operator needs to provide maps indicating specific locations and dimensions of the following:

1. disposal areas for overburdens, waste material or spoils material;
2. topsoil or substitute topsoil material stockpiles;
3. specific reclamation activities or applications to be performed at final reclamation;
4. disturbed area already permitted and covered by a reclamation surety vs areas which are not yet permitted and bonded;
5. pre-law disturbances to be redisturbed or currently active. These areas will require a different approach to reclamation.

These maps must represent all areas to be included in the amended mine notice. An overall small scale map should be submitted along with a series of larger scale maps designating specifics for separate sites or combination of sites.

R613-004-106 - Operation Plan

1. The operator must identify areas where waste materials are being generated. These materials need to be described by the operator, including analyses for acid producing qualities or alkaline wastes (acid-base analysis and SAR). Other analyses may be required by the Division if these analyses prove to be positive; or may be required depending upon the origin of wastes generated.
2. The Division needs to be informed of any potentially dangerous processing chemicals which may be utilized by the operator on site.
3. The Division will require that the operator describe the soils in areas to be disturbed. This is necessary to evaluate the salvageability potential of mine site soils. If well developed topsoil does not exist in the area, other materials can be successfully substituted. Such material might include: overburden, spoils, sediments from ponds, borrow material, or poorly developed B or C horizon soils.

If no topsoil or substitute soil material exists to use as a planting medium, the operator must describe the site conditions creating the deficiency to obtain a variance. The Division will probably ask that the operator find a means of alleviating the deficiency.

4. The operator must develop and describe a plan for the salvaging and redistribution of topsoil or substitute soil material on all areas to be disturbed on site. Areas which were disturbed pre-law are exempt from topsoil salvage. However, it will be necessary to develop alternative methods to construct viable plant growing mediums in these areas, i.e. the use of substitute material and soil amendments, such as mulches and fertilizer. Also, site specific plant seed mixtures should be developed for such sites.

SALVAGE TOPSOIL

5. The operator has requested Division assistance in developing a description of the existing plant communities associated with the site. I suggest that, if we all agree, we schedule another field trip to the site within the next 2 months. We can do a quick plant community evaluation as part of this trip.
6. The operator will need to provide descriptions and locations for all: waste stockpiles, tailing facilities and water storage or treatment (sediment ponds) found or to be constructed on site.

R613-004-107 - Operation Practices

1. What type of erosion control techniques will be implemented on site? The operator needs to evaluate areas where erosion may become a problem and take proper measures to prevent erosion. Erosion control measures might include: silt fencing of drainages; straw bale placement in drainages and/or ditches; construction of on site or off site drainage channels; contemporaneous reclamation; sediment pond construction, etc.
2. Concurrent or contemporaneous reclamation should be considered by the operator in this mining and reclamation plan (Notice of Intent). Areas no longer required by the operator for mining should be reclaimed in a timely fashion. Such reclamation will help to reduce a bond or limit its increase as the operation expands.

R613-004-109 - Impact Assessment

1. What will be the impacts of mining on slope stabilities? What are the locations of problem slopes and their extent? What steps will Geneva take to mitigate these instabilities? If slopes are to be left at steep angles (>3:1) what steps will the operator take to prevent erosion and meet plant establishment standards?

R613-004-110 - Reclamation Plan

1. What are the postmining landuses to be for the various areas covered by this permit?
2. The Division will require a detailed description of the methods by which various facilities are to be reclaimed, i.e. impoundments, roads, buildings, etc.
3. Will any facilities be left for post mine landuse? If so, the operator needs to identify these facilities and describe the post mine landuse for each.
4. What type of planting program will be applied to various acres of this site? Because of the number differences of the areas to be included in this site, different planting programs will be needed. Sites disturbed pre-law will require a different seed mix and different soil amendments than virgin sites, or sites disturbed more recently by the operator.

What grading and stabilization procedures will be used at final reclamation? Will topsoil be applied, substitute material or no material be applied? What seed mixtures and rates will be applied on various sites?

R613-004-111 - Reclamation Practices

1. If deleterious materials (spoils, wastes, tailings) are generated on site, how will these be neutralized?
2. How will the operator reclaim pits or trenches generated from mining? If they are not to be reclaimed, the operator must explain why and request a variance.
3. The operator must state in the plan, that pure live seed will be used. Also, the seed must be certified and tagged by the distributor. The operator must verify certification at the time of reclamation.

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R613-004-112 - Variances

1. The operator must explain the reasoning for any variance requests made to the Division. The Division will use information provided by the operator as means of approving or denying a variance request. The operator has requested variances for the pit wall and for topsoil salvage. We will need more information before granting such variances. Which pit wall? Which areas for topsoil salvage exclusion?

jb
MNM021008.1

Find
proper
place